Good morning

I am Ron Heimler and along with my colleague Peter Kilduff we represent the College of Agriculture at Cal Poly Pomona.

We have come today to highlight the critical issue of human resource development for the future of the California agricultural sector and to ask for $85,000 from the specialty crop funds to match fund a pilot program aimed at developing a long term solution to this chronic and systemic issue threatening the future prosperity of the sector.

Over the past 18 months we have been working with employers in the apparel sector regarding the mismatch between the needs of the industry and the flow of talent from universities – both in terms of numbers and career-specific capabilities. We have been successful in engaging a number of major manufacturing and retailing organizations in addressing this problem.

At the beginning of this year, the Dean of the College of Agriculture, Dr Les Young, asked us to address this issue on behalf of the College. He explained the difficulty in recruiting students into agriculture areas and the consequent rapid aging of the California agricultural workforce.

Since January we have conducted informal field interviews with members of the State Board of Food and Agriculture and senior officers of key companies in the industry. In addition to shortages of recruits, findings from these interviews also revealed a theme that new hires lack what has come to be known as essential employability skills. These include: math, communication, critical thinking, problem solving, work ethic, the ability to work in teams and in a diverse culture. And bilingual skills for on-farm management.

We have submitted a grant proposal to the California Agricultural Research Initiative (ARI) for funding support to address the problem. The proposed project will develop an intervention strategy (initially at Cal Poly Pomona) involving:

- a measurement phase that will identify the key problems and their underlying causes;
- an implementation phase, in which corrective intervention strategies using proven tools will be deployed ; and
- an assessment phase in which outcomes of the intervention strategy will be evaluated

This is a project that will be applied as a pilot study at Cal Poly Pomona. On its conclusion we expect to have proven the validity of our approach in addressing these critical issues. We will subsequently seek to develop industry sponsorship for a roll-out of the program in partnership with other California universities with agriculture and related programs for a state-wide impact. We believe our approach will also provide a template to resolve similar issues in other high value California industries.

The estimated cost of this project is $150,000 over 12 months. The ARI grant requires

cash match funding of $85,000. We have received strong letters of support from a number of leaders in the agriculture industry, including most of the members of the State Board of Food and Agriculture. We not been successful in obtaining commitments of financial support from industry. They want to see a workable solution developed before they commit. Therefore we are hear to ask for support for this initiative from the specialty crop funds.
Our project is strategic in nature, not another research study that will collect dust on a shelf. The project team is entrepreneurial and understands the need to deliver what is promised the first time, on-time, and on budget. It is a vision that includes communication, collaboration, and cooperation among the stakeholders. It is a vision that will deliver the strongest possible competitive advantage at the least cost as the result of process re-engineering.
California agriculture is important to the state and national economy and represents a critical component of national security. Developing a workforce that is properly equipped with the skills needed to address the challenges of the 21st century agriculture industry is of great importance. To help ensure the appropriately trained work force is available three things need to take place. First, we need to connect with the stakeholders who hire agriculture graduates to ensure our programs are meeting their needs. Second, we need to help to ensure the faculty, who are responsible for the curriculum understand the changing needs of the industry. Finally, it is important we reframe the bias and perceptions that students in both secondary and post secondary education have about the industry. This is critical to be able to attract students to high education agricultural programs.
California is a global leader in agriculture in terms of research and development, product and process innovations, productivity, sector diversity, and exports. Many Californian companies are positioned in specialized higher value market niches with innovative products and processes. California agriculture is driven by technology and fueled by innovation that demands a properly skilled workforce.
However, lingering perceptions of the agricultural sector as an archaic, low paid, sunset industry persist. These stem in part from agriculture's 'traditional' status and declining importance in the national economy, the decline of rural populations and an aging of the workforce due to progressive reductions in the need for labor through productivity advances. Combined with lower than average earnings, these perceptions have made it increasingly challenging for the industry to attract new talent. The age of the workforce in the agricultural sector has steadily increased from 43 in 1970 to 55 in 2006.
Ensuring California's competitiveness in the agriculture sector means ensuring that the state's workforce has the skills that the agriculture industry requires. Consequently, there is a need for increased collaboration between the private sector and post secondary education institutions to develop a sustainable talent stream with the capabilities to drive continued technological advancement in the sector.

Exacerbating the problem is a perceived mismatch between student capabilities and aspirations, the objectives of post-secondary education institutions, and the needs and recruitment practices of employers. New hires are seen as lacking soft skills, including: work ethic, self management skills, punctuality, team-working, communication, critical thinking, problem solving and entrepreneurship: all considered essential to succeed in the modern agricultural sector. Additionally, there is a perceived reluctance among students to take and master the harder (math and science) courses now needed in the modern agriculture industry.

The result is sub-optimal hiring outcomes that impacts industry performance, with unfilled vacancies and new hires that require costly additional training and remedial education. Due to a perceived lack of real world relevance in courses and curricula, students are considered unable to put what they have learned in the classroom into practice requiring a costly remediation. Field interview have reported that in some cases training can take up to one year.

There is also an apparent disconnect between what faculty and industry consider to be the relevant issues. This lack of coordination creates a mixed message between what is taught and what is needed adding to sub-optimal outcomes and industry frustration. The perception is that faculty training doesn't necessarily lend itself to the needs of the agriculture industry. There is a need for more practical research than lab research. Some respondents to field interviews with higher education experience note that curriculum shifts will be difficult to implement. However we currently enjoy the support of our interim dean who is also a member of our project management team. There is currently a search underway for a new dean and it would present another obstacle if we have to re-establish support within the College.

For their part, employers are also passive, with limited involvement in post secondary education institutions, the primary provider of their most strategic resource: human capital. Despite presence on advisory boards, internship opportunities and scholarship programs, there is no systemic involvement of employers. The result is a lack of communication with both educational institution faculty and students. This permits many students to perceive the industry lacking in opportunity and to involve manual labor when in fact it is driven by technology and innovation with initiatives including robotics, sustainability, water conservation and green technologies. Opportunities in the agriculture industry also include many traditional business careers including human resource management, marketing and finance that are overlooked during career searches.

This issue is not a new one in traditional sectors of the economy, such as agriculture. It has long been studied and debated and it is a source of deep seated frustration within the industry and to some extent in higher education institutions.

Gentlemen we have a vision and we have a plan. Our project seeks to educate students with the skills that industry needs and expects so that our students are the right people for the jobs in the 21st century workforce. Achieving this outcome will provide the human capital to innovate processes and create a sustainable workforce.

We have almost exhausted our networking opportunities in the agricultural and financial sectors. This is why we stand before you today. To emphasize our commitment to this project, I flew in from the east coast at 1 a.m. Peter and I drove from Pomona at 6 a.m. to speak for a few minutes before we return to Pomona and I return to the east coast at midnight. This trip was mostly self funded.
To move our project forward we are specifically seeking support to apply for funding from the block grants that the CDFA will receive from the farm bill's specialty crop provision to fund our project.
Time is short. There is a deadline to demonstrate pending financial support for the ARI grants.
We envision planting a single seed in terms of our pilot study with specialized people tending this seed as it begins to take root and grow. They will look at current processes and find new innovative and creative ways to grow this tree stronger than before. When questions arise that cannot be answered additional specialists are brought into the process as needed to create an interdisciplinary cross functional team effort. The tree grows taller and stronger than other trees. A seed falls and another similar tree grows organically creating a stand of differentiated trees. People come to see these trees and wonder how they came to be. The process is shared but now our first tree that became a stand of trees is a forest. Others are just starting to grow their first trees. They too find ways to improve upon what was done and share with others so the trees continue to be taller and stronger. The original effort is further ahead as a first mover but we still learn from others. First locally, then regionally, nationally, and finally globally the trees thrive. It becomes a continual process with no end in site. Similar to game theory it's a win- win situation.
The first tree is the proposed pilot study. The trees become a forest of a regenerative supply of sustainable human capital. We will become an innovation laboratory of critical thinking and the contact point and connective tissue between industry and academe leveraging interdepartmental resources and challenging students and faculty to think outside the box for innovative solutions.
Gentlemen we have a vision- an Ag vision- please help us make it happen for the students and their communities, the industry, the region, and the State of California.
Thank you